

Pending Claims

1. An isolated and purified *ced-3* nucleic acid comprising a nucleic acid which encodes the amino acid sequence of SEQ ID NO: 19.

3. The isolated and purified *ced-3* nucleic acid of claim 1, comprising the sequence of SEQ ID NO: 18.

4. An isolated RNA encoded by the nucleic acid of claim 1.

70. An isolated and purified *ced-3* nucleic acid comprising a mutation in SEQ ID NO:18, wherein said mutation in *ced-3* is selected from the group consisting of:

- a) n1040;
- b) n718;
- c) n2433;
- d) n1164;
- e) n717;
- f) n1949;
- g) n1286;
- h) n1129;
- i) n1165;
- j) n2430;
- k) n2426; and

l) n1163.

71. An isolated and purified *ced-3* nucleic acid comprising a mutation in SEQ ID NO:18, wherein said mutation is selected from the group consisting of:

- a) a C to T at nucleotide 2310 of SEQ ID NO:18, resulting in a L to F alteration at position 27 of SEQ ID NO:19;
- b) a G to A at nucleotide 2487 of SEQ ID NO:18, resulting in a G to R alteration at position 65 of SEQ ID NO:19;
- c) a G to A at nucleotide 5757 of SEQ ID NO:18, resulting in a G to S alteration at position 360 of SEQ ID NO:19;
- d) a C to T at nucleotide 5940 of SEQ ID NO:18, resulting in a Q to termination alteration at position 403 of SEQ ID NO: 19;
- e) a C to T at nucleotide 6322 of SEQ ID NO:18, resulting in a Q to termination alteration at position 412 of SEQ ID NO:19;
- f) a G to A at nucleotide 6342 of SEQ ID NO:18, resulting in a W to termination alteration at position 428 of SEQ ID NO:19;
- g) a C to T at nucleotide 6434 of SEQ ID NO:18, resulting in a A to V alteration at position 449 of SEQ ID NO:19;
- h) a C to T at nucleotide 6485, resulting in a A to V alteration at position 466 of SEQ ID NO:19;

i) a G to A at nucleotide 6535, resulting in a E to K alteration at position 483 of
SEQ ID NO:19;

j) a C to T at nucleotide 7020, resulting in an S to F alteration at position 486 of
SEQ ID NO:19;

k) an alteration in mRNA splicing at nucleotide 6297.

72. An isolated and purified *ced-3* nucleic acid comprising a mutation in SEQ ID
NO:18, wherein said mutation in *ced-3* is selected from the group consisting of:

- a) C to T at nucleotide 2310 of SEQ ID NO: 18;
- b) G to A at nucleotide 2487 of SEQ ID NO: 18;
- c) G to A at nucleotide 5757 of SEQ ID NO: 18;
- d) C to T at nucleotide 5940 of SEQ ID NO: 18;
- e) G to A at nucleotide 6297 of SEQ ID NO: 18;
- f) C to T at nucleotide 6322 of SEQ ID NO: 18;
- g) G to A at nucleotide 6342 of SEQ ID NO: 18;
- h) C to T at nucleotide 6434 of SEQ ID NO: 18;
- i) C to T at nucleotide 6485 of SEQ ID NO: 18;
- j) G to A at nucleotide 6535 of SEQ ID NO: 18;
- k) C to T at nucleotide 7020 of SEQ ID NO:18.